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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,805	08/21/2003	Hung-Chun Chiu	MR1035-1296	7403

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EXAMINER

BROOME, SAID A

ART UNIT PAPER NUMBER

2671

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/644,805	<b>Applicant(s)</b> CHIU, HUNG-CHUN	
	<b>Examiner</b> Said Broome	<b>Art Unit</b> 2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 1, 8, 14, and 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Am*

## DETAILED ACTION

### *Claim Objections*

Claims 1, 8, 14, and 15 are objected to because of the following informalities: The term overlaid is spelled incorrectly; the correct spelling is overlaid. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Cosatto et al. (US Patent 5,995,119).

Cosatto et al. describes the limitation of claim 1, selecting a target image, in column 3 lines 64-67 and in column 4 lines 9-16. It is stated that the program is executed on a personal computer, and the facial parts of interest are loaded from memory, therefore the target image must have been selected in order for the corresponding parameterized facial parts to be called from memory. Cosatto et al. also describes selecting at least one characteristic area of the target image. In column 5 lines 42-44 it is summarized that particular areas of the face are determined to be overlaid on the target image for animation, and all other regions of the face are left undisturbed, therefore a selection process must have been enacted to choose only particular

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characteristic areas of the target image, column 5 lines 33-35. It is later stated in the reference that the target image and at least one coordinate value of the characteristic area is captured in column 7 lines 24-32 where it is stated that the original facial shape, as well as the transformed face areas are captured. Later Cosatto et al. describes transforming the target image overlaid by the characteristic area using at least one coordinate value in column 4 lines 17-22 where it is shown that the characteristic areas are referenced using control points or coordinates to enable transformation.

Cosatto et al. teaches the limitation of claim 2 that at least one characteristic is moved to be overlaid over an area of the target image or vice versa in column 5 lines 42-44 and 29-30, where the characteristic areas of the face are described as being positioned on the base face or target image to produce an animated sequence or transformation.

In claim 3 a method that selects different characteristic marks depending on various target images or pictures is described and is taught by the reference in column 7 lines 35-42. Cosatto et al. states that the selection of facial characteristic parts can be different depending on the individual target images.

Cosatto et al. teaches the limitation of claim 4 that at least one characteristic area is a default position defined by a pre-set mask in column 7 lines 24-32, where it is shown that the parameters and position coordinates of the original image are referenced in memory before animation or transformation takes place. Therefore, the mask used to capture a particular characteristic area of the original image is defined by those predetermined coordinates before the transformation of the target image is executed.

The limitations of claims 5, 11, and 18 are illustrated and discussed by Cosatto et al. in Figure 2a and column 6 lines 39-50 respectively, where it is described that the distances and positions of characteristic areas are placed relative to certain points and parameters accordingly which supports the fine tuning and adjustment of the particular facial parts that overlay the target image.

Cosatto et al. teaches the limitations of claims 6 and 21 in column 4 lines 23-27 where the face parts of the target image are combined with a speech synthesizer for audio capabilities. The transformation of the target image is also described to be dependent on the audio because the parameters adjust according to the audio.

The limitation of claim 7 is described by Cosatto et al. in column 10 lines 42-47, as well as in column 1 lines 5-8, where it is stated that the invention was implemented using a computer that clearly executes software capable of transforming the target image.

Cosatto et al. describes the limitations of claims 8 and 15 in column 5 lines 48-49 of the reference by explaining the use of a mask to overlay at least one area of a target image in which the particular facial area region is overlaid on the target image. Later Cosatto et al. describes capturing at least one coordinate of the target image overlaid by the mask in column 6 lines 3-6 and in column 7 lines 28-29 where it is conveyed that the characteristic areas are defined using particular control points and coordinates to determine their position on the target image. In column 10 lines 42-47, the invention is described as being implemented on a computer; therefore the coordinate related to the image overlaid by the mask would have been captured. Storing the image and the coordinate data is described in column 5 lines 46-47 and in column 7 lines 28-29, where it is stated that the coordinates of the target image and the coordinate are stored in

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memory. Cosatto et al. further describes the limitations of claims 14 and 15 in column 5 lines 33-35 and 66-67 where it is expressed that the areas of the target image overlaid by the mask are selected. It is stated that only particular areas of the face are focused on for animation or transformation, while all other parts are unaffected. Therefore, a selection process would have been present in order to enable the areas of interest to be chosen. Cosatto et al. further describes the limitations of claims 14 and 15, when the reference describes the calculation of at least one coordinate of the area of the target image overlaid by the mask in column 6 lines 54-56, where it is conveyed that the points which reference the areas of the face to be transformed, which are illustrated in Figure 2b, are determined to be calculated by computer software since the referenced invention is executed on a computer system. The animation of the areas of the target image overlaid by the mask using at least one coordinate, which is also described in claims 14 and 15, is taught by Cosatto et al. in column 7 lines 24-29 and in column 5 lines 42-45 where it is stated that the regions of the face overlaid onto the base face result in an animation of the target image.

Cosatto et al. teaches the limitations of claims 9 and 16, in which the mask is a transparent film mask in column 5 lines 54-58. It is described that the mask is transparent and defines the transparency of the facial characteristic area overlaid onto the target image. The transparent film mask improves the presentation of the image by merging the borders of the characteristic areas over the target image, which improves the realism of the image.

Cosatto et al. describes the limitations of claims 10 and 17. The mask is described as a digital mask displayed by software in column 5 lines 48-49 and 54-55, where the mask is defined

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as a particular area of the face part that is stored in the computer and defines the transparency of each pixel comprising the image, which is displayed by software.

Cosatto et al. teaches the limitations of claims 12 and 19, in column 5 lines 42-45, where it is described that the base image, and the particular characteristic areas of the image which are defined my parameters which define that coordinate of those regions, are utilized to create an animated image.

The limitations of claims 13 and 20 are described by Cosatto et al. in column 5 lines 42-49, where it is stated that the areas of the target image where the mask overlays the target image are animated, where the facial parts contain a transparent mask that is positioned on top of the base face for animation.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571) 272-2931. The examiner can normally be reached during the hours of 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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